

School Size Research: Reference List

Allen, L. with Almeida, C. & Steinberg, A. (2001, August). Wall to wall: Implementing small learning communities in five Boston high schools. *LAB Working Paper No. 3*. Providence, RI: Northeast and Islands Regional Educational Laboratory a program of The Education Alliance at Brown University. Available:

<http://www.lab.brown.edu/public/pubs/LABWorkPaper/Wall2Wall.pdf>

This paper looks at the experiences of five large, impersonal high schools in Boston as they restructure into smaller learning communities. Three years into a district-wide reform effort, the schools provide insight into the opportunities, tensions and challenges faced by large urban high schools as they undertake whole school reform. The authors discuss key findings from the five schools and their implications for reform in other school districts.

Ancess, J. (1997). *Urban dreamcatchers: Launching and leading new small schools*. The National Center for Restructuring Education, Schools, and Teaching (NCREST). Teachers College, Columbia University. Available:

<http://www.tc.columbia.edu/~ncrest/dreamcatchers.htm>

This report offers strategies on how to launch and lead a new small school. Ancess describes five components critical to the success of a new small school: vision, organizational structure and perseverance to implement the vision, a committed constituency of staff, students, and parents, a sophisticated understanding of the local education bureaucracy, and financial resources. The report also includes a planning guide for launching a new small school.

Bill & Melinda Gates Foundation. (2003). *Making the case for small schools*. Available:

<http://www.gatesfoundation.org/NR/Downloads/ed/evaluation/BMG911SmallSchoolsBrochure.pdf>

This foundation brochure provides information about the current state of high schools and highlights key research on the benefit of small schools for all students.

Boss, S. (2000, Winter). Big lessons on a small scale. *Northwest Education Magazine*, 6 (2). Available: http://www.nwrel.org/nwedu/winter_00/1.html

Among educators and policymakers there is a growing respect for learning that takes place within small schools. This article, featured in a Northwest Education Magazine issue centered on smaller learning communities, considers definitions and examples of smallness, costs associated with downsizing and offers a list of recommended online resources for obtaining additional information on the issue.

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Clinchy, E. (Ed.). (2000). *Creating new schools: how small schools are changing American education*. New York: Teachers College Press, Columbia University.

In this book, scholars and experts explore some of the major reform issues confronting the American system of public education today. Considerable attention is given to the creation of small, decentralized schools in New York City and Boston. In addition to outlining the seven attributes of successful school systems, the authors provide sources of further information, networking, and technical assistance.

Cotton, K. (1996). School size, school climate, and student performance. *School Improvement Research Series (SIRS), Close-up #20*. Portland, Or: Northwestern Regional Educational Laboratory. Available: <http://www.nwrel.org/scpd/sirs/10/c020.html>

This topical synthesis defines what is meant by "small" schools and presents an overview of the existing research on school size. Research findings repeatedly demonstrate that small schools are superior to large schools on most measures, and equal to them on the remaining measures.

Cotton, K. (1996, December). Affective and social benefits of small-scale schooling. *ERIC Digest*, Clearinghouse on Rural Education and Small Schools. EDO-RC-96-5. Available: http://www.ericfacility.net/databases/ERIC_Digests/ed401088.html

This digest outlines characteristics of the body of research on school size, including research on: feelings and attitudes, social behavior, "why smaller is better", school size and educational equity, and school-within-a-school plans. The author concludes that research in the affective and social spheres affirms the superiority of small-scale schooling.

Cotton, K. (2001, December). *New small learning communities: Findings from recent literature*. Portland, OR: Northwest Regional Educational Laboratory. Available: <http://www.nwrel.org/scpd/sirs/nslc.pdf>

Cotton provides a comprehensive overview of the recent research on small schools and small learning communities. Particular attention is paid to studies completed in the past five years.

Darling-Hammond, L. with Alexander, M., & Prince, D. (2002). *Redesigning schools: What matters and what works - 10 features of good small schools*. School Redesign Network at Stanford University. Available: <http://www.schoolredesign.com/srn/binary/SchoolsBook.pdf>

This publication details ten school reform lessons that help create effective smaller learning communities: safe environments where exciting and rigorous academic work occurs in an equitable context—a setting where all groups of students succeed academically, graduate at high levels, and go on to college and productive work. Each section is accompanied by one or more profiles of successful small schools that are putting these features into practice and creating powerful learning opportunities for their students.

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Darling-Hammond, L., Aness, J., & Wichterle Ort, S. (2002, Fall). Reinventing high school: Outcomes of the Coalition Campus Schools Project. *American Educational Research Journal*, 39(3). pp. 639-73. Available:

<http://www.schoolredesign.net/srn/binary/Reinventing%20HighSchool%20-%20LDH%20et%20al.pdf>

The Coalition Campus Schools Project (CCSP) was launched in New York City in the early 1990s as part of a broader city initiative to create small, new model schools. This seven-year study of the CCSP found that the new schools that were created to replace a failing comprehensive high school produced, as a group, better attendance, lower incident rates, better performance on reading and writing assessments, higher graduation rates, and higher college-going rates than the previous school, despite serving a more educationally disadvantaged population of students. This report details the school design features that appeared to contribute to these successful outcomes.

Funk, P.E., Bailey, J. (1999, September). *Small schools, big results: Nebraska high school completion and postsecondary enrollment rates by size of school district*. Walthill, NE: Center for Rural Affairs. Available: <http://www.cfra.org/pdf/Small%20Schools-.PDF>

This report aims to reframe the school size debate by showing that by two important measures of student outcome—high school completion and postsecondary enrollment rates—smaller schools in Nebraska generally perform better than larger ones. The so-called “inefficiencies” of small schools are greatly reduced when calculated on the basis of cost per graduate, and virtually disappear when the social costs of non-graduates and the positive societal impact of college-educated citizens are considered.

Gregory, T. (1992). Small is too big: Achieving a critical anti-mass in the high school. In, *Source book on school and district size, cost, and quality*. (pp.1-31). Minneapolis, MN: Minnesota University, Hubert H. Humphrey Institute of Public Affairs; Oak Brook, IL: North Central Regional Laboratory. Available: <http://www.gatesfoundation.org/NR/downloads/ed/evaluation/smallistobig.pdf>

Gregory presents his theory of critical anti-mass: creating a high school so small that only an individualized program makes sense in it, a school so small that control is not a central issue and every person has a say in how the school is run.

Gregory, T. (2000, December). *School reform and the no-man's-land of high school size*. Seattle, WA: Center on Reinventing Public Education. Available: <http://www.smallschoolsproject.org/articles/download/gregory.pdf>

This report describes four recent forces that have influenced the small schools movement—the information age, the emergence of an adolescent culture, the students' rights movement, and society's changing view of organizations. Gregory describes the different small school reform models that have emerged, the ideal size for each model, and the implications for reform efforts.

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Gregory, T. (2001). Breaking up large high schools: Five common (and understandable) errors of execution. *ERIC Digest*. ERIC Clearinghouse on Rural Education and Small Schools. Available: http://www.ericfacility.net/databases/ERIC_Digests/ed459049.html

This digest reviews recent research on breaking up large, impersonal high schools and discusses five common errors made in downsizing attempts: errors of autonomy, size, continuity, time, and control. The author also recommends several technical assistance resources to help reformers avoid the errors described.

Howley, C., Strange, M. & Bickel, R. (2000, December). Research about school size and school performance in impoverished communities. *ERIC Digest*. ERIC Clearinghouse on Rural Education and Small Schools. EDO-RC-00-10. Available: <http://www.ericfacility.net/ericdigests/ed448968.html>

This Digest reviews the results of a series of studies, collectively known as the “Matthew Project,” that examined the relationship between school size, student socioeconomic status, and student achievement. The authors describe the aim of the Matthew Project studies and summarize Project findings. The authors conclude the discussion with a section on implications.

Howley, C. & Bickel, R. (2002; 2000). *School size, poverty, and student achievement*. Washington, D.C.: The Rural School and Community Trust. Available: <http://www.ruraledu.org/docs/sapss/sapss.html>

Research findings from a four-state study demonstrate that smaller learning communities can mitigate the damaging effects of poverty on student achievement. State and national result summaries are available at this website.

Irmsher, K. (1997). School size. *ERIC Digest*. ERIC Clearinghouse on Rural Education and Small Schools. EDO-EA-97-5. Available: <http://eric.uoregon.edu/publications/digests/digest113.html>

This digest summarizes recent research on school size, refuting the theory that larger schools have produced greater academic success at lower costs. The research indicates that large schools do not work for minority and low-income students, tend to hinder attendance and student performance, and may have greater operating and per-pupil costs than small schools. School size experts recommend a school enrollment of between 300 to 900 students and that the school-within-a-school model is a crucial first step toward restructuring.

Klonsky, M. (2002, December). Small schools and teacher professional development. *ERIC Digest*. ERIC Clearinghouse on Rural Education and Small Schools. EDO-RC-02-6. Available: <http://www.ael.org/eric/digests/edorc02-6.pdf>

This digest reviews some of the recent research on professional development issues in smaller learning communities. Topics covered include: (1) what works and what doesn't work in professional development; (2) learning from each other; (3) faculty-directed professional development; (4) professional development to meet particular community needs; and (5) prevention of burnout, conflict, and obstacles to collaboration. The authors conclude that small schools can provide an environment conducive to new and improved forms and models of professional development.

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Lawrence, B.K. (2002). *Lowering the overhead by raising the roof ... and other Rural Trust strategies to reduce the costs of your small school*. Washington, D.C.: The Rural School and Community Trust. More information is available at: <http://ruraledu.org/rpm/rpm405d.htm>

This report contains 13 strategies to help communities reduce the costs of maintaining, building, and renovating small schools. Advice for getting started includes understanding the resistance to small schools, examining existing state policy, questioning the “schools within a school” approach, and planning ahead. The report concludes with a list of resources for further information on the specific strategies.

Lawrence, B.K., Binger, S., Diamond, B.M., Hill, B., Hoffman, J.L., Howley, C.B., Mitchell, S., Rudolph, D., Washor, E. (2002). *Dollars & sense: the cost effectiveness of small schools*. Cincinnati, OH: KnowledgeWorks Foundation. Available: http://www.kwfdn.org/ProgramAreas/Facilities/dollars_sense.pdf

Dollars & Sense is a summary of the information currently available on the cost effectiveness of small schools. The report answers two fundamental questions: can small schools be built cost effectively and has anyone done so? Using data drawn from 489 schools submitted to design competitions in 1990-2001, the authors conclude that small schools can be built cost effectively and that many districts are doing so.

McAndrews, T. & Anderson, W. (2002, January). Schools within schools. *ERIC Digest 154*. Clearinghouse on Educational Management. ED-99-C0-0011. Available: <http://eric.uoregon.edu/publications/digests/digest154.html>

This digest discusses the benefits, drawbacks, varieties, and sources of funding for schools within schools. Designers of schools within schools seek the advantages of both large and small schools by placing students into small learning communities while using the resources of the larger existing facilities. The authors conclude that developing a school within a school requires careful planning by participants.

Meier, D.W. (1996). The big benefits of smallness. *Educational Leadership*, 54 (1), 12-15. Available: http://www.ascd.org/publications/ed_lead/199609/meier.html

Meier outlines the seven factors that contribute to the success of small school reform: governance, respect, simplicity, safety, parent involvement, accountability, and student belonging.

Mitchell, S. (2000, Summer). Jack and the giant school. *The New Rules*, 2 (1). Available: <http://www.newrules.org/journal/nrsum00schools.htm>

“Jack and the Giant School” summarizes American school size trends—from small learning communities in the early and mid part of the past century, to the Post World War II shift towards large, comprehensive schools, to rising support for the small schools movement today.

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Nathan, J. & Febey, K. (2001). *Smaller, safer, saner, successful schools*. Washington D.C.: National Clearinghouse for Educational Facilities and Minneapolis, MN: The Center For School Change, Humphrey Institute of The University Of Minnesota. Available: <http://www.edfacilities.org/pubs/saneschools.pdf>

This report presents brief case studies of 22 public school buildings that provide small school environments in shared spaces. The schools represent urban, suburban, and rural communities in 12 states and include both district-run and charter public schools. The case study analysis reveals that on average, smaller schools can provide a safer place for students, a more positive, challenging environment, higher achievement, higher graduation rates, fewer discipline problems, and much greater satisfaction for families, students, and teachers. The analysis also reveals that schools that share facilities with other organizations can offer broader learning opportunities for students, high quality services to students and their families, higher student achievement, better graduation rates, and a way to stretch and make more efficient use of tax dollars.

Raywid, M.A. (1996). Downsizing schools in big cities. *ERIC Digest*. ERIC Clearinghouse on Urban Education. EDO-UD-96-1. Available: <http://www.ericfacility.net/ericdigests/ed393958.html>

Raywid reviews the current trend towards downsizing urban schools, noting the ample evidence that small schools benefit the entire school community: teachers, students and parents. This digest is an aid to educators attempting to determine whether and why to pursue downsizing. Small school models, philosophies and future prospects are addressed.

Raywid, M. A. (1996). *Taking stock: The movement to create mini- schools, schools-within-schools, and separate small schools*. Urban Diversity Series No 108. New York: ERIC Clearinghouse on Urban Education, Teachers College, Columbia University. (ERIC Document Reproduction Service No. ED 396 045). Available: <http://eric-web.tc.columbia.edu/mono/UDS108.pdf>

This study is derived from an extensive review of the literature and documentation, evaluation, and policy studies of schools-within-schools and small schools. Raywid discusses different downsizing efforts, the reasons for which small schools are being established, and the types of subschools that are being launched (houses, mini-schools, schools-within-schools). Downsizing efforts in three cities, New York, Philadelphia and Chicago are highlighted. Raywid concludes that downsizing can increase student participation, reduce dropouts, improve achievement, and enhance teacher efficacy.

Raywid, M.A. (1997, December; 1998, January). Small schools: A reform that works. *Educational Leadership*, 55 (4), 34-39. Available: http://www.ascd.org/publications/ed_lead/199712/raywid.html

Numerous case studies provide reliable evidence that small schools lead to improved student achievement. In addition to the effects of small schools on student achievement, large-scale research suggests that small schools are less violent and that bonds created in small schools are likely to influence students' personal habits, aspirations and post-high-school behavior. Small school success is attributed to the following factors: the more human scale of such schools, more committed teachers, coherent mission, and relative autonomy.

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Raywid, M.A. (1999, January). Current literature on small schools. *ERIC Digest*. ERIC Clearinghouse on Rural Education and Small Schools. EDO-RC-98-8. Available: <http://www.ericfacility.net/ericdigests/ed425049.html>

This digest begins with an overview of the large-scale quantitative studies on the productiveness and effectiveness of small schools. It then covers new directions in small schools research, including associated policy issues, individual success and failures, and essential elements and other implementation considerations. School reform literature that interweaves school size with other reform issues is also addressed.

Raywid, M.A. & Schmerler, G. (2003). *Not so easy going: The policy environments of small urban schools and schools-within-schools*. Charleston, WV: ERIC Clearinghouse on Rural Education & Small Schools.

The authors discuss the difficulty of remaking large urban schools into small schools by providing several case examples of school restructuring from four cities and nine single-unit- or multi-school campuses. This book examines often hostile environments in which many small schools and schools-within-schools must operate, focusing on political difficulties that urban small schools and schools-within-schools encounter with state and district regulations and bureaucracies.

Roellke, C. (1996). Curriculum adequacy and quality in high schools enrolling fewer than 400 pupils (9-12). *ERIC Digest*. ERIC Clearinghouse on Rural Education and Small Schools. EDO-RC-96-7. Available: http://www.ericfacility.net/databases/ERIC_Digests/ed401090.html

A challenge facing small high schools is their ability to support a broad and diverse curriculum. This digest presents evidence illustrating that many small high schools maintain curricula and programs comparable in quality to those offered at larger schools. Three components of attaining curriculum adequacy through high school restructuring are identified: a common academic curriculum, high academic standards and authentic instruction.

The Small Schools Project. (2003, Spring). *Planning resources for teachers in small high schools*. Seattle, WA: The Small Schools Project at the Center for Reinventing Public Education, University of Washington. Available: <http://www.smallschoolsproject.org/articles/planning.html>

The Small Schools Project plans to publish a series of collections of promising curricular resources and pedagogical practices that promote powerful teaching and learning in small high schools. Resources include practical tools, school profiles, sample classroom activities, and critical readings on selected topics. This project aims to help high schools move their focus from designing small schools to re-thinking teaching and learning practices.

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Steifel, L., Iatarola, P., Fruchter, N. & Berne, R. (2000, Spring). High school size: Effects on budgets and performance in New York City. *Educational Evaluation and Policy Analysis*, 22(1). Available: <http://www.nyu.edu/wagner/publications/stiefel/highschoolsize-effectsonbudget...pdf>

This paper reports the results of a two-year study that assessed the effect of school size on budgets and performance in New York City public high schools. The study concluded that while smaller high schools typically had higher per-student costs than most of the city's high schools, they were more cost effective than most schools because they produced stronger student performance, higher graduation rates and lower dropout rates.

Steinberg, A. & Allen, L. (2002). *From large to small: Strategies for personalizing the high school*. A joint publication of Jobs for the Future, Carnegie Corporation of New York, and the Northeast and Islands Regional Educational Laboratory at Brown University. Available: <http://www.jff.org/jff/PDFDocuments/Largetosmall.pdf>

In this publication, Jobs for the Future presents profiles of schools and districts involved in converting large high schools into smaller, more focused and personalized learning communities. The report presents concrete practices and routines that can help guide teachers and school leaders seeking to implement a small schools strategy.

Toch, T. (2003). *High schools on a human scale: How small schools can transform American education*. Boston: Beacon Press.

The large comprehensive high school developed nearly a century ago as an economical means of providing a range of curriculum tracks that educated only the best and the brightest to high levels. These large high schools have become obsolete. Today's society requires that all students be educated for college, work and effective citizenship. The author presents case studies of four very different schools that have rejected the trappings of the traditional large comprehensive high school to become smaller, more personal places of learning.

U.S. Department of Education, Office of Elementary and Secondary Education and Office of Vocational and Adult Education. (2001, November). *An overview of smaller learning communities in high schools*. Washington, D.C.: Author. Available: http://www.ed.gov/offices/OVAE/HS/SLCP/slchighschools_research_09_01.doc

“This background paper is designed to help policymakers and school leaders use the new Smaller Learning Communities program to implement small school strategies in large high schools and within school districts. The paper describes the federal initiative, highlights small school structures and strategies that may be implemented with grant funds, reviews the context of the growing consensus around smaller schools, and summarizes the research that undergirds the new grant program” (U.S. Department of Education, 2001).

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Wasley, P., Fine, M., Gladden, M., Holland, N.E., King, S.P., Mosak, E., & Powell, L.C. (2000, June 20). *Small schools: Great strides: A study of new small schools in Chicago*. New York: Bank Street College of Education. Available: <http://www.bankstreet.edu/gems/publications/smallschools.pdf>

Report findings are based on a two-year study of 150 small schools established in Chicago between 1990 and 1997. Researchers discovered that students in these small schools exhibited increased academic achievement, decreased dropout rates and lower levels of violence.

Winokur, M. (2001, June). *Policy brief: Relationship between high school size and educational outcomes*. Colorado State University: Research and Development Center for the Advancement of Student Learning. Available: <http://www.colostate.edu/depts/r-dcenter/BOE%20SWAS%20policy%20brief.pdf>

This policy brief provides a review of the literature on small school research, with an emphasis on recent studies and meta-analyses (1990-present) regarding school size and school-within-a-school (SWAS) models.